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| 09/216,004      | 12/17/1998  | WING C. CHAU         | 81862.P106          | 1360             |

7590 08/12/2004

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| EXAMINER |
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BOAKYE, ALEXANDER O

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| ART UNIT | PAPER NUMBER |
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2667

DATE MAILED: 08/12/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/216,004

Applicant(s)

CHAU ET AL.

Examiner

ALEXANDER BOAKYE

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-23 and 25-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-34 is/are allowed.
- 6) ☒ Claim(s) 1,5,6,12,35 and 39 is/are rejected.
- 7) ☒ Claim(s) 3,4,7-11,13,15,17-21,36-38 and 40-44 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7</u> . | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 6, 12, 16, 35 and 39 are rejected under 35 U.S.C. 102(e) as being anticipated by Notenboom et al. (US Patent # 5,748,468).

Regarding claims 1 and 6, Notenboom teaches a system, comprising: a digital signal processing (DSP) resource manager configured to ensure DSP availability for each of a number of channels as individual ones of the channels are activated (column 10, lines 45-51; see Fig. 6A).

Regarding claims 12, Notenboom teaches a method, comprising: a managing a digital signal processing (DSP) system to ensure DSP availability for each of a number of channels as individual ones of the channels are activated (column 10, lines 45-51; see Fig. 6A).

Regarding claim 16, Notenboom discloses that ensuring DSP availability comprises allocating a number of DSP resource among activated ones of the channels (column 10, lines 48-51; see Fig. 6A).

Regarding claim 35, Notenboom discloses an apparatus comprising a means for managing a digital signal processing (DSP) system to ensure DSP availability for each

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of a number of channels as individual ones of the channels are activated (column 10, lines 45-51; see Fig. 6A).

Regarding claim 39, Notenboom discloses that ensuring DSP availability comprises allocating a number of DSP resource among activated ones of the channels (column 10, lines 48-51; see Fig. 6A).

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Notenboom et al. (US Patent # 5,748,468) in view of Sanders et al. (US Patent # 6,704,308).

Regarding claim 5, Notenboom teaches a digital signal processing (DSP) resource manager (see 100, Fig. 4). Notenboom differs from the claimed invention in that Notenboom does not disclose that the channels comprise voice channels. However, Sanders discloses that the channels comprise voice channels (column 3, lines 30-59; lines connected between telephones 201, 215 and PBX correspond to the claimed voice channels). One of ordinary skill in the art would have been motivated to incorporate voice channels into the communication network of Notenboom in order to process voice application. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate voice channels such as

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the one taught by Sanders into the communication network of Notenboom with the motivation being that it provides channel sharing..

***Allowable Subject Matter***

3. Claims 2-4, 7-11,13-15, 17-21 36-38 and 40-44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 22-34 are allowable

The following is a statement of reasons for the indication of allowable subject matter: As to claims 35-44, the prior art of record does not teach a DSP resource manager configured to allocate the DSP resources among DSP resource group according to the requirements of a plurality of channels utilizing the DSP resources, allocating sufficient DSP resources to one of the DSP resource groups to process all of the plurality of channels.

***Response to Arguments***

4. Applicant's arguments with respect to claim1-23,and 25-44 have been considered but are moot in view of the new ground(s) of rejection.

**Conclusion**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Boakye whose telephone number is (703) 308-9554. The examiner can normally be reached on M-F from 8:30am to 6:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham, can be reached on (703) 305-4378. The fax number is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 305-4750.

Alexander Boakye

Patent Examiner

AB

8/6/04

  
CHI PHAM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600 8/9/04